

Multi-channel Erbium doped fiber amplifier card

Features

- ✓ Low-noise high flatness design
- ✓ Adjustable output power
- ✓ High precision ATC keep system stable operation
- ✓ Precision AGC / APC circuit keeps the output
- ✓ Power stability
- ✓ Card design highly integrated, space-saving cabinet
- ✓ Expansion is very convenient
- ✓ Strict accordance with Bellcore GR-1312-CORE
- ✓ requirement for design



Applications

- ✓ C-band 40/80CH DWDM
- ✓ Other optical systems

Description

The product is multi-channel EDFA of high flattening and high stable output. The kernel component of the product is high availability pump laser and high-performance gain flattening filters. The product has high stable output, high gain flatness and high reliability by using unique APC (automatic power control) and ATC (automatic temperature control). The system's flatness and noise can achieve the best optimization by the gain flattening filters of professional design. The system is convenient to regulation and display, reliable, intelligent by using high stable and high precision MPU.

Performance index

OBA

Parameters	Unit	Symbol	Min	Typ	Max
Operating Wavelength	nm	λ_c	1529	-----	1564
Saturate Output Power	dBm	Po	-----	-----	22
Input Power	dBm	Pi	-23	-----	+12
Gain	dB	G	8	-----	24
Noise Figure	dB	NF	-----	4.5	6
Power/Gain Stability	dB	ΔP_o	-----	± 0.05	± 0.2
Input Isolation	dB	ISOi	30	-----	-----
Output Isolation	dB	ISOo	30	-----	-----
Flatness	dB	GF	-----	1	-----
Return loss	dB	RL	-----	-----	-45
PDG	dB	PDG	-----	-----	0.3
PMD	ps	PMD	-----	-----	0.5
Consumption	W	P	-----	-----	10

OPA

Parameters	Unit	Symbol	Min	Typ	Max
Operating Wavelength	nm	λ_c	1529	-----	1564
Saturate Output Power	dBm	Po	-----	-----	22
Input Power	dBm	Pi	-30	-----	+5
Gain	dB	G	8	-----	33
Noise Figure	dB	NF	-----	4.5	6

Parameters	Unit	Symbol	Min	Typ	Max
Power/Gain Stability	dB	ΔP_o	----	± 0.05	± 0.2
Input Isolation	dB	ISO _i	30	----	----
Output Isolation	dB	ISO _o	30	----	----
Flatness	dB	GF	----	1	----
Return loss	dB	RL	----	----	-45
PDG	dB	PDG	----	----	0.3
PMD	ps	PMD	----	----	0.5
Consumption	W	P	----	----	10

Laser class information security

IIIb level laser products

With single-mode fiber pigtail connectors

Wavelength: 0.96~1.68 μ m

Maximum power: <400mW

Products cannot be transported in a charged state

Note: this instruction outside of any control, regulation and treatment may result in hazardous radiation exposure



Machine frame information

Machine frame appearance description

1U Machine frame



1U Front panel



1U Side panel



1U Back panel

Explain:

- ① Main control card slot
- ② Business card slot, maximum support four business cards, our business cards all can be mixed interpolation and hot swappable
- ③ Fan slot, Support for fan hot swap and independent replacement
- ④ Scalable lug ⑤ Lug instillation position ⑥ Side vent
- ⑦ Power 1 slot, can plug in AC power supply or DC power supply, support hot swap
- ⑧ Power 2 slot, can plug in AC power supply or DC power supply, support hot swap
- ⑨ Grounding screw

2U Machine frame



2U Front panel



2U Side panel

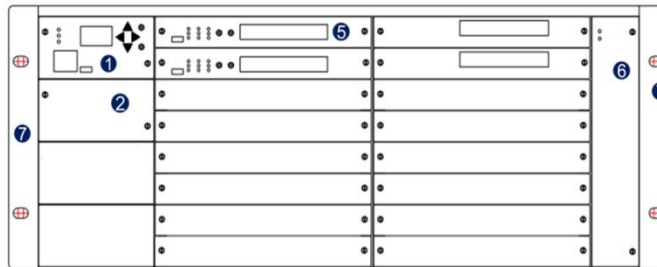


2U Back panel

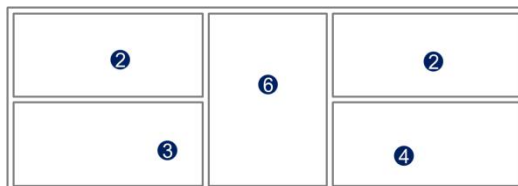
Explain:

- ① Main control card slot
- ② Expansion slot, can plug in eight Ethernet switch cards or other cards
- ③ Business card slot, maximum support eight business cards, all our business card can be mixed interpolation, hot swappable
- ④ Fan slot, Support for fan hot swap and independent replacement
- ⑤ Scalable lug ⑥ Lug instillation position ⑦ Side vent
- ⑧ Power 1 slot, can plug in AC power supply or DC power supply, support hot swap
- ⑨ Power 2 slot, can plug in AC power supply or DC power supply, support hot swap
- ⑩ Grounding screw

4U Machine frame



4U Front panel



4U Back panel

Explain:

- ① Main control card slot
- ② Expansion slot, can plug in eight Ethernet switch cards or other cards
- ③ Power 1 slot, can plug in AC power supply or DC power supply, support hot swap
- ④ Power 2 slot, can plug in AC power supply or DC power supply, support hot swap
- ⑤ Business card slot, maximum support sixteen business cards, all our business card can be mixed interpolation, hot swappable
- ⑥ Fan slot, Support for fan hot swap and independent replacement
- ⑦ Scalable lug

Machine Frame Component

Main control card

Main control card panel

- ① Equipment status indicator: P1(Power1)、P2(Power2)、RUN
- ② HD dual color LCD display screen
- ③ Operation keys
- ④ Ethernet communication interface
- ⑤ Micro USB equipment upgrade interface
- ⑥ Optical transceiver slot(Support 100/1000Mbps SFP)
- ⑦ Optical transceiver working status indicator



Equipment management

- ✓ Equipment state, card performance can be visible completely
- ✓ Card parameters can be set by panel
- ✓ Support in or out of band network management
- ✓ Support SNMP, Client management.

Machine frame correlation parameter

Parameters		Unit	Specifications
Environmental parameter	Working temperature	°C	-10~ 60°C
	Storage temperature	°C	-20°C~ 75°C
	Relative temperature	°C	5% ~ 95% No condensation
Size	1U	mm	482.6W × 300D × 44.5H
	2U	mm	482.6W × 300D × 86H
	4U	mm	482.6W × 300D × 176H
Power Supply	AC	V	85~264, 50~60hz
	DC	V	36~72
Consumption	1U	W	< 50(Max)
	2U	W	< 100(Max)
	4U	W	< 200(Max)

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by GIGALIGHT before they become applicable to any particular order or contract. In accordance with the GIGALIGHT policy of continuous improvement specifications may change without notice.

The publication of information in this data sheet does not imply freedom from patent or other protective rights of GIGALIGHT or others. Further details are available from any GIGALIGHT sales representative.

Shenzhen R&D Center & Factory

Address: 1-3F, Building F4, Changfeng Industrial Park, Liuxian 3rd Road, Bao'an

Call Us: +86 (755) 2682 1500

Technical Support: tech@gigalight.com

Customer Service: rma@gigalight.com



Gigalight, founded in 2006, is headquartered in Shenzhen, China. Based on becoming the best provider and design collector of the global optical network plug and play middleware. We are committed to providing high cost-effective products and services for cloud service providers, various information and IT operators, network communication equipment providers. The company focuses on the development of DCI optical interconnection technology, high-definition video optical transmission technology, 5G optical network technology, coherent optical communication technology and silicon photonics chip integration technology. The main products of Gigalight include data center active optical cables, optical transceivers, passive optical components, coherent optical transceivers, DCI WDM transmission solution and optical transceiver cloud platform.